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September 17, 2013 FedEx: _____

Mr. Steve Faryan
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5 (SC-5J)
77 W. Jackson Blvd.
Chicago, IL 60604

RE: Proposed Work Plan
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

Dear Mr. Faryan,

BP Products North America Inc. (BP) is submitting a Work Plan for the above-referenced property. The Work Plan proposes field investigation activities to evaluate subsurface conditions resulting from historical operations conducted at the subject property. The Work Plan has been prepared in support of an Administrative Order on Consent (AOC) as entered into voluntarily by the United States Environmental Protection Agency (EPA) and BP. The AOC provides for the preparation and performance of monitoring, testing, analysis and reporting on property formerly leased by BP's corporate predecessor at the Wedron Ground Water Contamination Site located in Wedron, LaSalle County, Illinois (the Wedron Site). Investigation activities are summarized below.

Background

The subject property is located on a railroad right-of-way on the east side of Wedron, Illinois along County Highway 11 (Figure 1). BP's corporate predecessor, Standard Oil Company (Indiana) leased the property from the railroad from approximately 1921 to December 1971. The property was used for petroleum bulk plant operations. Site plans attached to leases dating from 1926 to 1942, indicate the presence of a warehouse and two storage tanks. Additionally, Standard Oil leased a limited area between the property and railroad to accommodate above ground two inch diameter unloading pipes and an unloading rig. Historical correspondence indicates that by December 1971, the warehouse (garage), oil storage tanks, unloading pipes and storage barrels were removed from the property.

Previous investigations adjacent or near the subject property include the removal of a 560-gallon underground storage tank (UST) in July 2012 by Illinois Railway, LLC. During the removal of the UST, approximately 80 tons of impacted soils were removed and disposed of. A total of twelve soil samples were collected from the floor and sidewalls of the excavated areas. The samples were submitted for laboratory analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX), and total lead analyses. During the UST removal, a representative of Illinois Railway contacted the Illinois Emergency Management Agency (IEMA) and incident number 20120767 was assigned to the release. A 45-Day Report/Corrective Action Completion Report which provided a summary of the removal activities and data collection was submitted to the Illinois Environmental Protection Agency (IEPA) on August 7, 2012. The report requested a No

Further Remediation (NFR) letter for the incident. The IEPA approved the request and granted a NFR for the release on August 20, 2012.

On August 23, 2012, six soil borings were advanced in the area of the former UST as part of a voluntary site assessment by Illinois Railway. Samples were collected and submitted for analysis of BTEX and total lead. No analyzed parameters were identified in exceedance of TACO Tier 1 industrial/commercial soil remediation objectives. Lead was detected in the samples ranging from 2.3 to 30 ppm. The data was summarized in a report prepared on behalf of Illinois Railway, titled Voluntary Environmental Site Assessment, Illinois Railway Easements, dated October 2012.

On May 16, 2013, one soil sample was collected by the EPA near the former bulk plant and analyzed for volatile organic compounds (VOCs) as part of a larger investigation completed in association with the EPA's Wedron Groundwater Site investigation. Benzene was detected at concentrations greater than TACO standards for the soil component of the groundwater ingestion exposure route for Class I groundwater.

Project Approach

The proposed activities will be completed in accordance with all applicable subsections of IEPA, Title 35: Environmental Protection, Subtitle G: Waste Disposal and Chapter I: Pollution Control Board, Subchapter D: Underground Injection Control and Underground Storage Tank Programs. All laboratory procedures and methods will meet the minimum specified detection limits in accordance with TACO: 35 IAC Part 742 and Part 734 of Subchapter D, Petroleum Underground Storage Tanks, specifically Section 734.415 regarding Data Quality.

Scope of Work

Task 1 – Field Sampling Plan

Geophysical Survey – A review of historical data including historical site plans and leases will be completed to identify locations of former tanks and piping on the property. A geophysical survey will be completed for the property and a portion of the adjacent right-of-way associated with former piping (Figure 2) using a Ground Penetrating Radar (GPR) and electromagnetic survey to identify the potential presence of metallic objects.

If the results of the survey indicate the potential presence of a metallic object, the area will be marked for further investigation. The investigation will include carefully excavated test pit(s) to identify the source of the survey readings. If an object is identified as an UST or associated piping, it will be removed under the supervision of the Office of the Illinois State Fire Marshal (OSFM). Additionally, sampling and reporting in accordance with Illinois regulations will be completed to obtain regulatory closure of the UST removal.

The survey will also be used to identify potential unknown or abandoned buried utilities prior to conducting drilling activities. If utilities are identified, they will be marked to avoid these areas during drilling activities. Details of the utility locating plan are provided under Task 2 – Field Investigation, Utility location.

Location of the Property – The boundaries of the property will be confirmed using a professional survey company. Global Positioning Systems (GPS) technology will be utilized as well to confirm the locations of the previous investigations described above as compared to the subject property. The survey data and GPS data will be used to accurately display the spatial location of the site property and locations of previous investigations.

Sampling Plan – Data from previous investigations and the geophysical survey will be used to develop a field sampling plan (FSP). The FSP will be dependent on the results of the geophysical survey and potential removal of a subsurface object. A minimum of nine (9) soil borings will be advanced on the property. Based upon the findings from the soil investigation, installation of permanent monitoring well(s) is proposed if soil concentrations are above TACO Tier 1, Class I soil component of groundwater ingestion remediation objectives (Figure 2). The borings will be utilized to characterize the fill and subsurface materials and help delineate the presence or absence of gasoline-related constituents on the property.

Site Health & Safety Plan – A site Health and Safety Plan (HASP), consistent with 29 CFR 1910, will be prepared to describe the methods to be employed to protect the health and safety of personnel involved in field investigation activities. The HASP will be updated as necessary in order to safeguard employees and others present at the site during intrusive site work. A copy of the HASP will be forwarded to the EPA prior to conducting field work. Updated versions of the HASP will be forwarded to the EPA prior to additional field events as appropriate.

Task 2 – Field Investigation

Utility location - Public utilities will be notified using the Illinois Joint Utility Locating Information for Excavators (JULIE) utility locating services 48 hours prior to drilling. Additionally, utilities will be surveyed and marked during the geophysical survey. BP will also work with Illinois Railway to review utility locations in the proposed drilling area.

If utilities are identified within the proposed drilling area, they will be carefully exposed through vacuum excavation prior to conducting drilling activities to minimize potential impacts to unknown or abandoned buried utilities.

Drill and collect samples from 9 soil borings – A minimum of nine (9) soil borings will be advanced on the property. Proposed boring locations will be dependent on site conditions, accessibility and the results of the geophysical survey and utility locate effort. Proposed locations will be provided to the EPA beforehand to allow for review and approval.

After utility clearance activities have been completed, direct push technology will be used to advance the soil borings from ground surface to refusal/bedrock, or the groundwater table. Additional step out borings can be completed based on the screening results as time permits.

Soils will be logged and classified by a field technician according to the Unified Soil Classification System (USCS). Two (2) soil samples from each boring location will be collected for analysis. The samples will be screened with a sensitive photoionization detector (PID), such as the Ultra Ray model. The samples will be collected based on PID readings and field observations with the goal of achieving vertical delineation of impacted soils above the water table. If there are no elevated PID readings, then one (1) sample will be collected from 0-3 feet below ground surface (bgs) in undisturbed soil and the other from the bottom of the boring just above the water table, or at the top of the bedrock. If there are elevated PID readings at only a single depth, then one (1) sample will be collected at that depth and the other from the bottom of the boring just above the water table, or at the top of the bedrock. No soil samples will be collected below the water table. Quality control samples will be collected in the field, including field duplicates, trip blanks, and matrix spike/matrix spike duplicates (MS/MSD).

Analytical - Soil samples will be analyzed for VOCs via Method 8260, Semi-Volatile Organic Compounds (SVOCs) via Method 8270, total lead via Method 6010, and gasoline- and diesel-

range organics (GRO/DRO) total petroleum hydrocarbons (TPH) via Methods 5031/8015 and 8015, respectively. The soil samples selected for analytical testing will be placed in the appropriate containers provided by the laboratory, logged, labeled, placed in iced coolers, and sent to Pace Analytical Services, Inc. (Pace), of Minneapolis, Minnesota for analytical testing using standard chain-of-custody procedures.

To support the laboratory analyses, a Quality Assurance Project Plan (QAPP), as approved by the EPA, will be provided within 30 days following execution of the AOC and prior to the start of subsurface field activities.

Install and Develop Permanent Monitoring Well(s) - If soil results indicate the presence of impacted soils above TACO Tier 1, Class I soil component of groundwater ingestion remediation objectives, a minimum of three (3) monitoring wells will be installed at the locations of the elevated concentrations. If several boring locations indicate soil concentrations above TACO Tier 1, Class I soil component of groundwater ingestion remediation objectives, the areas with more elevated concentrations will be targeted for monitoring well installation. Proposed locations for monitoring wells will be provided to the EPA beforehand to allow for review and approval.

The monitoring well(s) will be drilled with a truck-mounted drill rig or suitable alternative, capable of drilling into bedrock. The monitoring well(s) will be constructed with ten feet of two-inch diameter Polyvinyl Chloride (PVC) flush-threaded screen (0.010-inch slot) attached to solid PVC casing. The bottom of the screened interval will be capped with a threaded PVC bottom cap, and the top of the solid casing will be closed with a two-inch diameter lockable expansion plug-type cap. The monitoring well(s) will be constructed such that the screened interval will intersect the water table during seasonal groundwater fluctuations. A flush mounted well box with a bolt down cover will be installed into concrete to surround and protect the top of the well.

After well installation, the monitoring well(s) will be developed to allow free entry of water, to minimize turbidity of the sample, and to minimize clogging.

Monitoring wells will be surveyed to measure the top of casing and groundwater elevations. BP will work with the EPA to tie in site specific survey data to survey data collected in association with the Wedron Ground Water Contamination Site.

If UST(s) are located during test pit activities, additional soil sampling and potential groundwater sampling activities will be conducted after the UST(s) are removed in accordance with Illinois regulations.

Sample Monitoring Well(s) and Collect Water Level Measurements Prior to collecting a groundwater sample, static water levels will be measured and recorded using an electronic oil/water interface probe capable of detecting the presence of water and any liquid-phase hydrocarbons (LPH). Groundwater samples will be collected from the monitoring well(s) using low-flow methodologies. The samples will be analyzed for VOCs via Method 8260, SVOCs via Method 8270, and GRO/DRO TPH via Methods 5031/8015 and 8015, respectively.

Quality control samples will be collected in the field, including field duplicates, trip blanks, and MS/MSDs. The groundwater samples selected for analytical testing will be placed in the appropriate containers provided by the laboratory, logged, labeled, placed in iced coolers, and sent to Pace, of Minneapolis, Minnesota for analytical testing using standard chain-of-custody procedures.

Additional sampling of the monitoring wells will be based upon the sample results and direction from the EPA. The wells will remain in place until regulatory approval for abandonment is provided.

Decontamination and Investigation-Derived Waste - Tools and equipment will be steam cleaned between each boring to help prevent cross-contamination between the boreholes. Sampling tools will be cleaned between each sample collection event using a non-phosphate detergent wash and clean water rinse to help prevent cross-contamination between samples.

Soil cuttings and water will be placed into separate 55-gallon drums for temporary storage in a designated location. Upon completion of the waste profile requirements for disposal, the drums will be transported to a designated landfill or treatment facility.

Field Assumptions

- The proposed work will be conducted within the property limits based upon historical leases with the railroad. An access agreement with the Illinois Railway will be required.
- Field personnel and drilling subcontractors will be able to access all required portions of the site. All monitoring well locations will be accessible to a truck-mounted drill rig or suitable alternative.
- Field personnel will attempt to locate the proposed borings in readily accessible areas.
- Borings will be completed to refusal/bedrock (estimated to be approximately 23 to 25 feet bgs).
- Groundwater wells will be constructed such that the screened interval will intersect the water table (estimated to be approximately 23 to 25 feet bgs).
- Site access will be available at all times for field activities.
- EPA personnel will have access to groundwater wells installed as part of this Work Plan.

Task 3 – Technical Memorandum

A technical memorandum will be prepared summarizing the subsurface investigation that will include the following.

- Site Description
- Site Base Map
- Documentation of Field Activities including field procedures, sample preservation and handling methods, and boring logs
- A figure showing all boring/sampling locations in relation to the site recognized environmental conditions
- A figure showing the locations where contaminants were detected above the ROs, including lab results and depths of samples were collected.

- A table comparing detected chemicals to proposed TACO Tier 1 remediation objectives contained in 35 IAC Part 742
- Laboratory results and reports
- Boring logs, including PID data
- Geophysical survey results

Schedule

Below is a schedule of field investigation activities based on BP's current understanding of site conditions. If site conditions warrant additional time for field activities, a revised schedule will be immediately communicated to the EPA for approval.

- A QAPP will be provided within 30 days following execution of the AOC and prior to the start of subsurface field activities.
- A site-specific HASP will be forwarded to the EPA in October 2013, prior to conducting field work. Updated versions of the HASP will be forwarded to the EPA prior to additional field events as appropriate.
- The professional survey to confirm the boundaries of the former bulk plant and the geophysical survey will begin in October 2013.
- The public and private utility location review will be conducted at the time of the geophysical survey in October 2013, prior to conducting drilling activities.
- Results of the geophysical survey are expected approximately 15 days after completion. BP will provide a FSP, including proposed soil boring locations, to the EPA within 30 days after receipt of the results of the geophysical survey. Field activities will begin within 30 days of EPA approval of the FSP.
- Results of the soil sampling activities are expected approximately 15 days after completion. The results will be evaluated to assess if monitoring well installation and groundwater sampling are necessary as described in this Work Plan. If monitoring well installation and sampling are needed, BP will provide a FSP, including proposed monitoring well locations, to the EPA within 30 days after receipt of the results of the soil sampling activities. Monitoring well installation activities will begin within 30 days of EPA approval of the updated FSP.
- A Technical Memorandum will be provided to the EPA within 45 days after completion of field activities and receipt of analytical results.

Should you have any questions or require additional information regarding this report, please do not hesitate to contact me at (630) 420-5563.

Sincerely,

Jane Bohn
Strategy Manager

Attachments:
Figure 1 – Site Location Map
Figure 2 – Proposed Soil Boring Location Map

Cc: Douglas Reinhart, BP Legal
Stantec
Project file

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APPROXIMATE SCALE (FEET)

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FOR:

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SITE LOCATION MAP
FORMER BULK PLANT
WEDRON, ILLINOIS

FIGURE: **1**

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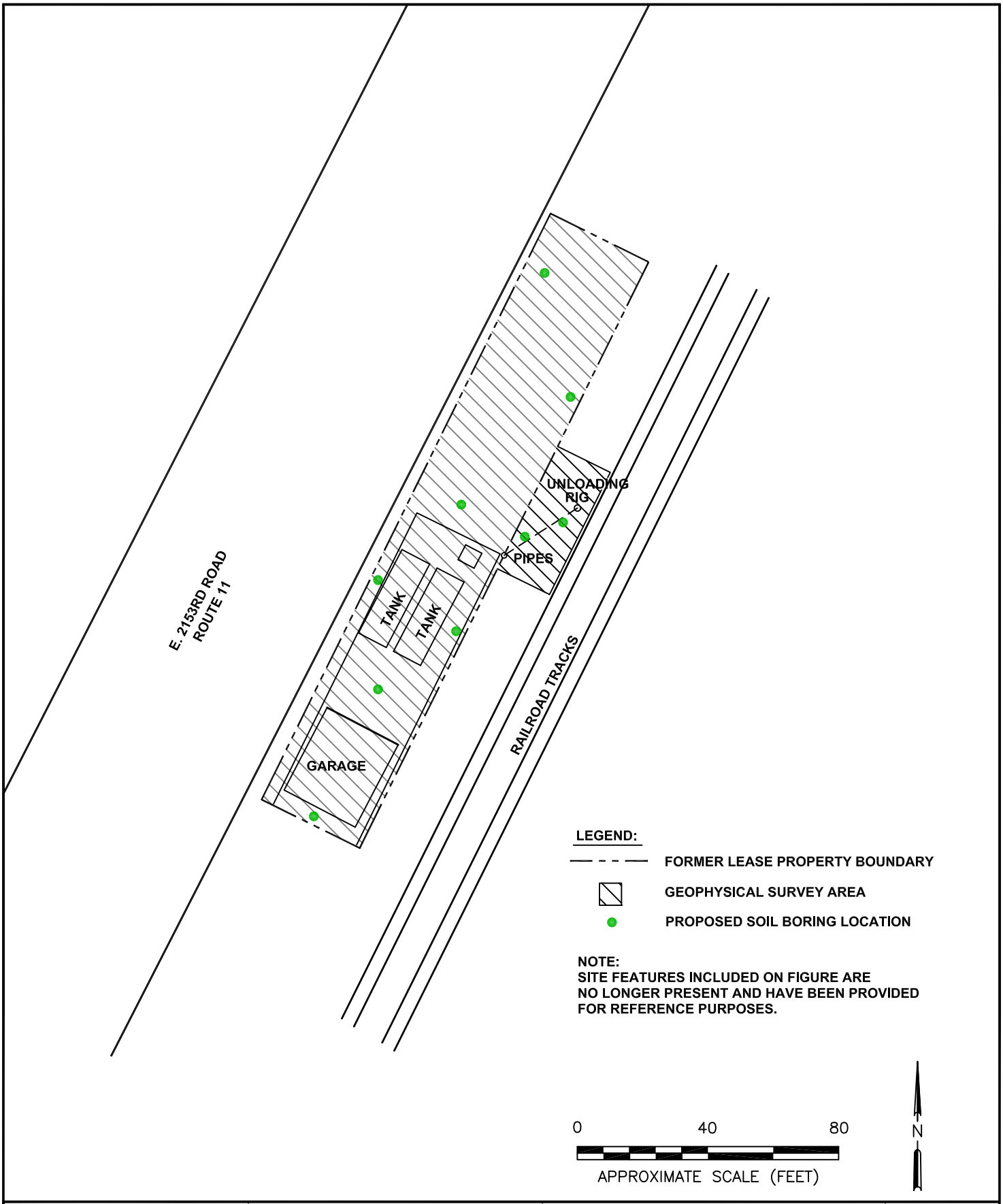

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PROPOSED SOIL BORING LOCATION MAP
FORMER BULK PLANT
WEDRON, ILLINOIS

FIGURE: **2**

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